

REMARKS

Claims 1 to 17 are pending. No claims are allowed.

1. Claims 1 to 14 are rejected under 35 USC 103(a) as being unpatentable over Hallifax et al. (U.S. Patent Pub. No. 2002/0018928) in view of Kasahara et al. (U.S. Patent No. 6,849,357). Hallifax et al. describes in Figs. 6 and 7 a cell comprising a cathode strip 50 of cathode active material 52 contacted to a cathode current collector 54 and having a downwardly facing slot 53 disposed at a midportion thereof. The anode 60 comprises an anode active material 62 contacted to an anode current collector 64 and having an upwardly facing slot 63 disposed at a midportion thereof. To form an electrode assembly, the cathode and anode are mated to each other at their respective slots 53, 63 to form a collapsible X-shaped assembly. This assembly is then folded in a bi-directional manner from the midportions. The completed electrode assembly 25 has the anode 60 on the outside with anode tabs 22 welded to the case 80 (paragraph 0031) while the cathode tabs 15 are connected to a terminal pin 82 electrically insulated from the casing by a glass-to-metal seal 86. In that respect, the anode active material does not make direct contact with the casing. Instead, the anode tabs 82 extending from the anode current collector provide electrical continuity to the negative polarity casing.

Kasahara et al. relates to a battery comprising an "electric element" built by interposing a separator between a belt-shaped positive electrode and negative electrode and spirally coiling them. The terminal edge of the positive

electrode projects upwards and a terminal edge of the negative electrode projects downwards. Current collectors are bonded to the terminal edge of the upwardly and downwardly extending positive and negative electrodes, respectively. At column 4, lines 3 to 9, a modification to the construction of the electric element is described. As before, a current-collecting lead is bonded to the upwardly extending positive electrode. Instead of bonding the lower part of the negative electrode to a current collector, however, "the outermost peripheral negative electrode of the electric element [is contacted] to the inside of the case, to effect current collection."

Independent claims 1, 5 and 11 set forth that the second portion of the first electrode comprising the first electrode active material (anode material or lithium) is directly contacted to an inner surface of the casing. This is illustrated in Fig. 2 where anode material 38 is in direct contact with the casing sidewall 46. Additionally, a conductor extends from the first current collector of the first portion of the first electrode to either the inner surface of the casing sidewall or to the first electrode active material directly contacted to the casing sidewall. Support for this latter aspect of the claimed invention is found in the specification at page 12, line 29 to page 13, line 4.

As described at page 12, lines 7 to 16 for the exemplary case-negative design, direct contact of lithium to the casing sidewall allows for more efficient heat dissipation from the cell to the ambient environment under abuse conditions. In addition to helping with heat dissipation, the claimed conductor improves electrical discharge at interior portions of the electrode assembly. In that respect, Kasahara et al. do

not teach connecting the negative electrode to both the casing sidewall and to a conductor extending between the sidewall and interior locations of the negative electrode. Hallifax et al., likewise, is devoted of such teachings.

Accordingly, amended independent claims 1, 5 and 11 are patentable over Hallifax et al. in view of Kasahara et al. Claims 2 to 4, 6 to 10 and 12 to 17 are allowable as hinging from patentable base claims.

Reconsideration of this rejection is requested.

It is believed that claims 1 to 17 are now in condition for allowance. Notice of Allowance requested.

Respectfully submitted,



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